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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/966,200
Filing Date: September 27, 2001
Appellant(s): SEETHARAMAN ET AL.

MAILED

DEC 13 2007

GROUP 3600

Theodore D. Fay III
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/2/2007 appealing from the Office action mailed 5/3/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6564367 B1

BECKETT ET AL.

5-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 – 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Beckett et al. (US Patent 6,564,368 B1)**.

3. In regards to **claim 1**, **Beckett** discloses a method of developing a computer system, comprising the computer-implemented steps of:

defining a first interface associated with a proposed view sub-system and with a proposed business logic sub-system, wherein the proposed view sub-system and the proposed business logic sub-system interact only via the first interface (**Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47**);

defining a second interface associated with a proposed handler sub-system and with the proposed business logic sub-system, wherein the proposed handler sub-system and the proposed business logic sub-system interact only via the second interface (**Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47**);

wherein the proposed view sub-system, the proposed business logic sub-system, and the proposed handler sub-system are all isolated from each other (**Column 1 Lines 44 – 47; Column 3 Lines 1 – 12, 44 - 47**);

creating the proposed view sub-system in accord with the first interface (**Column 6 Lines 20 – 27**); and

creating the proposed handler sub-system in accord with the second interface (**Column 6 Lines 20 – 27**).

Becket, however, fails to explicitly state the exact arrangement of 3 sub-systems with interfaces between each sub-system.

However, Becket does disclose that multiple interfaces can be used to connect multiple objects and that one of ordinary skill in the art would know that there are numerous ways of connecting the sub-systems (**Column 6 Lines 20 – 27; Column 8 Lines 23 – 27**). Moreover, it would have been obvious that the sub-systems would be isolated from each other when an interface is placed between them. Further still, it would be obvious that the sub-systems would be in accord with their respected interfaces in order to avoid compatibility issues.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that using the teachings of Beckett (**specifically Col. 6 L. 20 – 27 & Col. 8 L. 23 – 27**) the industry is assured the rapid, high-quality construction of products.

4. In regard to **claims 2 – 4**, **Beckett** discloses that multiple sub-systems with their respected interfaces can be used, as already discussed above.

5. In regards to **claim 5, Beckett** discloses wherein:

the first interface defines a plurality of methods for data storage and retrieval that are implemented in the business logic sub-system (**Column 6 Lines 34 – 55**).
6. In regards to **claim 6, Beckett** discloses wherein:

the second interface defines a plurality of methods of business logic that are implemented in the business logic sub-system (**Column 6 Lines 34 – 55**).
7. In regards to **claim 7, Beckett** discloses wherein:

the third interface is a listener interface that defines a plurality of methods in the handler sub-system which respond to actions in the view sub-system (**Column 10 Lines 48 – 60**).
8. In regards to **claim 8, Beckett** discloses wherein:

the fourth interface defines a plurality of methods which are implemented in the view sub-system for use by the handler sub-system (**Column 6 Lines 34 – 55**).
9. In regards to **claim 9, Beckett** discloses wherein:

the view sub-system includes a plurality of user interface objects (**Column 1 Lines 30 – 37; Column 3 Lines 1 – 8; 42 – 50**);

the handler sub-system includes a plurality of use case control objects (**Column 1 Lines 30 – 37; Column 3 Lines 1 – 8; 42 – 50**); and

the business sub-system includes a plurality of business logic objects (**Column 1 Lines 30 – 37; Column 3 Lines 1 – 8; 42 – 50**).
10. In regards to **claim 10, Beckett** discloses wherein:

the sub-systems are created substantially independently of each other once the interfaces have been defined **(discussed above)**.

11. In regards to **claim 11, Beckett** discloses a computer software system in a computer readable medium, said system comprising:

first instructions defining a view sub-system including presentation objects which provide a user interface **(Column 3 Lines 44 - 47)**;

second instructions defining a business logic sub-system including use case objects which hold business data and implement business functions **(Column 3 Lines 44 - 47)**;

third instructions defining a handler sub-system including controller objects which control actions of the view sub-system and actions of the business logic sub-system **(Column 3 Lines 44 - 47)**;

fourth instructions defining a data interface only through which the view sub-system obtains business data for the presentation objects **(Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47)**; and

fifth instructions defining a business interface only through which the handler sub-system invokes business functions **(Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47)**.

Becket, however, fails to explicitly state the exact arrangement of 3 sub-systems with interfaces between each sub-system.

However, Becket does disclose that multiple interfaces can be used to connect multiple objects and that one of ordinary skill in the art would know that there are numerous ways of connecting the sub-systems (**Column 6 Lines 20 – 27; Column 8 Lines 23 – 27**). Moreover, it would have been obvious that the sub-systems would be isolated from each other when an interface is placed between them. Further still, it would be obvious that the sub-systems would be in accord with their respected interfaces in order to avoid compatibility issues.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that using the teachings of Beckett (**specifically Col. 6 L 20 – 27 & Col. 8 L 23 – 27**) the industry is assured the rapid, high-quality construction of products.

12. In regards to **claim 12**, **Beckett** discloses sixth instructions defining a listener interface through which the handler sub-system responds to events in the user interface (**Column 10 Lines 48 – 60**).

13. In regards to **claim 13**, **Beckett** discloses sixth instructions defining a view actions interface through which the handler sub-system invokes actions in the user interface (**Column 1 Lines 30 – 37; Column 3 Lines 1 – 8; 42 – 50; Column 10 Lines 48 – 60**).

14. In regards to **claim 14**, **Beckett** discloses a computer program in a computer readable medium, said program comprising:

first instructions defining at least one view object including presentation objects which provide a user interface (**Column 3 Lines 44 - 47**);

second instructions defining at least one business logic object holding business data and implementing business functions (**Column 3 Lines 44 - 47**);

third instructions defining at least one handler object which controls actions of at least one of the view objects and actions of at least one of the business logic objects (**Column 3 Lines 44 - 47**);

fourth instructions defining a data interface only through which the at least one view object obtains business data for the presentation objects (**Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47**); and

fifth instructions defining a business interface only through which the at least one handler object invokes business functions (**Column 1 Lines 24 – 30, 44 - 47; Column 3 Lines 1 – 12, 44 - 47**).

Becket, however, fails to explicitly state the exact arrangement of 3 sub-systems with interfaces between each sub-system.

However, Becket does disclose that multiple interfaces can be used to connect multiple objects and that one of ordinary skill in the art would know that there are numerous ways of connecting the sub-systems (**Column 6 Lines 20 – 27; Column 8 Lines 23 – 27**). Moreover, it would have been obvious that the sub-systems would be isolated from each other when an interface is placed between them. Further still, it would be obvious that the sub-systems would be in accord with their respected interfaces in order to avoid compatibility issues.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that using the teachings of Beckett (**specifically Col. 6 L 20 –**

27 & Col. 8 L 23 – 27) the industry is assured the rapid, high-quality construction of products.

15. In regards to **claim 15**, **Beckett** discloses sixth instructions defining a listener interface through which the handler object responds to events in the user interface **(Column 10 Lines 48 – 60)**.

16. In regards to **claim 16**, **Beckett** discloses sixth instructions defining a view action interface through which the handler object invokes actions in the user interface **(Column 1 Lines 30 – 37; Column 3 Lines 1 – 8; 42 – 50; Column 10 Lines 48 – 60)**.

17. In regards to **claim 17**, **Beckett** discloses sixth instructions for further defining the view sub-system, the business logic sub-system, and the handler sub-system such that each sub-system is isolated from another sub-system **(Column 1 Lines 44 – 47; Column 3 Lines 1 – 12, 44 - 47)**.

18. In regards to **claim 18**, **Beckett** discloses sixth instructions for further defining the view sub-system, the business logic sub-system, and the handler sub-system such that each sub-system is isolated from another sub-system **(Column 1 Lines 44 – 47; Column 3 Lines 1 – 12, 44 - 47)**.

(10) Response to Argument

Claim 1 and Rebuttal to Examiner's Response

19. Applicants argue that Beckett does not teach, **"defining a first interface associated with a proposed view sub-system and with a proposed logic sub-system, wherein the proposed view sub-system and the proposed business logic**

sub-system interact only via the first interface and defining a second interface associated with a proposed handler sub-system and with the proposed logic sub-system, wherein the proposed handler sub-system and the proposed business logic sub-system interact only via the second interface.” As a further note, the Examiner understands the applicant’s invention to only be various interfaces with various sub-systems, or objects, wherein each interface contains a type of sub-system and that each sub-system is isolated from one another. The sub-systems use their respective interface to communicate to one another and to other parts of the system. The Examiner asserts that although Beckett does not disclose the exact arrangement or the same title of each of the sub-systems, as disclosed by the applicant, Beckett does disclose that multiple interfaces can be used with their respective objects (**Column 6 Lines 20 – 27**). Each object communicates to one another through some interface. Moreover, Beckett also discloses that,

“The Connection Editor 203 shows the status of connections between programs and allows end-users to create connections between programs (**Column 5 Lines 23 – 25**).

Thus, Interface Manager 410 only requires a reference to another components interface manager and the name of the connected interface property as the minimum information to establish a connection between interface properties.

With this information, the information managers of each component can automate data flow between the components without programming. One ordinarily skilled in the art would know that this is just one of numerous ways that

a connection editor—or any program capable of querying data from class meta-data, internal-storage, or external storage—could query available connection points from a program (**Column 8 Lines 17 – 27**)."

Applicant's argument that Beckett does not teach defining interfaces and sub-system is incorrect. The step of defining each of these components has obviously already been done in order for Beckett to carry out the invention, i.e. the programming of these components has already been done. Beckett teaches communication of these components with one another and that one skilled in the art would know that there are numerous methods of associating each of these devices depending on the client's needs as well as the amount of resources available.

Furthermore, the exact configuration that the applicant is trying to claim is only a design choice that is performed by the programmer. The applicant argues that, "In an analogy, the Examiner is effectively stating that a particular house constructed with a hammer is obvious because hammers are known in the art. Under the examiner's logic, one of ordinary skill would conclude that *any particular structure of the house* would be "obvious," no matter how ingenious the structure, simply because a patent directed to a hammer states that hammers can be used in the construction of the houses (**See Page 20 of 28 ¶ 2**)." However, the Examiner asserts that one does not get a patent on the design of a house since it is only a design choice, i.e. the cosmetic features made on the house would not affect the structural strength or integrity of the house. Further still, the Examiner notes that the applicant has not provided any advantageous reasoning as for the specific arrangement of the applicant's invention. Essentially, the applicant is

stating that one should be allowed to receive a patent because Inventor A decided to use Inventor B's method of nailing roof shingles in order to nail pink roof shingles to a house and despite the fact that both are using the same method of using a hammer to carrying out the nailing process Inventor A has rights to a patent because Inventor B is using blue roof shingles.

As a result, the Examiner that the specific arrangement being claimed by the applicant is only a design choice and that one having ordinary skill in the art who is relying on the teachings of **Beckett** would have found it obvious that various configurations can be accomplished. One of ordinary skill in the art would have been aware of both the advantages and disadvantages that different configurations would provide. Consequently, **Beckett** does, indeed, provide the necessary teachings and freedom to allow one of ordinary skill in the art to devise applicants claimed configuration if the configuration proved to provide the advantage of providing a system that is of high-quality and efficiency.

Claim 2

The applicant argues that **Beckett** fails disclose the limitations found in claims 2 – 10, 12, 13, and 15 – 18. Specifically, the applicant argues the **Beckett** fails to teach, “...defining a third interface...” and “...creating the proposed view sub-system in *accord with both the first and third interfaces*.” However, as discussed above, the applicant is only claiming additional interfaces with their respected sub-systems and where the sub-systems are in communication with one another through their respective interfaces.

The Examiner again asserts that one of ordinary skill in the art would have been aware

of both the advantages and disadvantages that different configurations would provide. As a result, **Beckett** does, indeed, provide the necessary teachings and freedom to allow one of ordinary skill in the art to devise applicants claimed configuration if the configuration proved to provide the advantage of providing a system that is of high-quality and efficiency.

Moreover, evidence that the applicant has not provided any concrete reasoning of why this specific configuration is advantageous can be seen in **claim 4, 11(e), and 12** where the applicant is providing yet another interface with its associated sub-systems.

Regarding the Examiner failing to state a proper reason to modify Beckett under the Standards of KSR Int'l

20. The applicant argues that the Examiner has not provided sufficient reasoning of why **Beckett** would provide sufficient reasoning for the modifications discussed above. However, as discussed above under the headings **Claim 1, Claim 2**, as well as in the Final Office Action the Examiner has already provided sufficient reasoning and rationale. The applicant further states, "Because one of ordinary skill knows that **numerous ways** exist to connect subsystems, one of ordinary skill also knows that **no reason exists to assume that one particular combination of connections should be adopted over another combination.**" However, as already discussed above, one of ordinary skill in computer programming would have been aware of the various combinations that are available to them and the advantages that each combination presents. Further still, the Examiner asserts on the level of detail that would be required would be dependent on the available resources that is available to the programmer.

That is to say, if a programmer has very limited resources the programmer would not be encouraged to create so many interfaces and sub-systems and would have a more difficult time to isolate a compatibility or programming error while a programmer who has limitless resources would be encouraged to create as many interfaces and sub-systems as possible in order to better isolate any compatibility or programming errors that may occur.

Regarding Beckett teaching away from the Invention and No Reason to Modify

Beckett

Applicant argues that **Beckett** “teaches away” from the claimed invention. Specifically, the applicant argues that **Beckett** does not teach isolating sub-systems through the use of interfaces. Further, as claimed, creation of the sub-systems is in accordance with a respective interface and not a standard interface technique. However, the Examiner asserts that all of these components must be made in accordance with one another and that the sub-systems must be made in accordance with the interfaces. If not, then compatibility issues would arise and one of ordinary skill in the art of programming is well aware of this situation. **Beckett** discloses, “...programs that implement the standard interface can then be dynamically connected to the program that calls the interface. This allows for high degree of modularity since there could be many programs supporting a standard interface yet with unique implementations that gives the program using the interface the ability to take advantage of many unique implementations to a single problem. The Connection Editor **203** has a common mechanism to interact with all programs, allow for the interrogation of the

interface of disparate programs, permit the establishment of connections between disparate programs, and automate the data flow between the interfaces of disparate programs when connections have been established (**Col. 6 Lines 43 – 54**).” As a result, it would have been obvious to one of ordinary skill that the sub-systems must be in accordance to their respective interfaces in order to enable the system, if not, compatibility issues would arise.

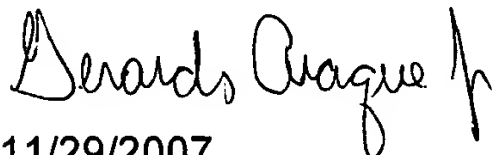
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Gerardo Araque Jr.



11/29/2007

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